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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,530	05/07/2001	Vincent J. McGahay	FI9-98-172US2	1010

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INTERNATIONAL BUSINESS MACHINES CORPORATION
DEPT. 18G
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HOPEWELL JUNCTION, NY 12533

EXAMINER

MALDONADO, JULIO J

ART UNIT	PAPER NUMBER
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2823

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/849,530

Applicant(s)

MCGAHAY ET AL.

Examiner

Julio J. Maldonado

Art Unit

2823

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 17 February 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.


The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: 19 and 22-25.Claim(s) rejected: 15-30.

Claim(s) withdrawn from consideration: _____

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
10. ☐ Other: _____


George Fourson
Primary Examiner

Continuation of 5. does NOT place the application in condition for allowance because: Applicant's arguments filed 02/17/2004 have been fully considered but they are not persuasive.

Applicants argue that the signed declaration filed on 09/22/2003 is sufficient to overcome the filing date of the prior art of record, Liu et al. In response to this argument, the declaration filed on 09/22/0003 under 37 CFR 1.131 has been considered but is ineffective to overcome the Liu et al. reference. The evidence submitted is insufficient to establish a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of the Liu et al. reference. The submitted evidence teaches forming an adhesion layer between a silicon nitride layer and a copper layer to cure adhesion deficiencies between these two layers. However, Liu discloses TaN, which is "a layer of a material that is poorly adherent to copper" as claimed. Therefore, independent claim 15 is open to form an adhesion layer between a copper and layer other than silicon nitride, such as tungsten or tantalum. Also applicants argue, "...since Liu et al. fail to even remotely mention silicon oxide and/or silicon nitride, the Declaration is clearly sufficient to overcome the above rejections with respect to claims 28-30...". In response to this argument, it is not necessary for the reference to disclose the materials shown in the declaration..